Index to ELECTRI•ONICS 1984 Feature Articles

Coil and Motor Manufacturing Tips	Page	Issue
Cost Reduction Through Automatic Testing of Electric Motors	61	Jan.
Testing Points to Problems in Armature Production	77	Feb.
Appliance and Motor Lead Wire Meet New Demands	44	Mar.
Evaluation of Tapes and Wrappers for Vacuum Pressure Impregnation of High Voltage Form Wound Coils	69	April
CAD Programs for Inductor, Reactor, Transformer Design	60	May
Production Balancing of Electrical Armatures	63	June
Moisture Resistant Banding Tape Secures Armatures From Centrifugal Forces	51	July
Concepts of D-C Brushless Motors	67	Aug.
A New Design Approach for Reciprocating Linear Motors	63	Sept.
Coil Winding Industry Trends Keyed to Changing Applications, Equipment Features	99	Oct.
Butt Stacking Cuts High Labor Costs in Transformer Laminations	65	Nov.
Multi-Mile Tapes Increase Coil Wrapping Productivity	63	Dec.

ELECTRI•ONICS Forum	Page	Issue
"Is printed circuit repair work expanding or receding as technology improves?"	6	Jan.
"What is the near term outlook for achieving essentially zero soldering defects in circuit boards?"	6	Feb.
"What recent equipment acquisitions have aided your printed circuit fabrication process the most?"	6	Mar.
"Do you feel UL standards are necessary and adequately address existing problems?"	11	April
"How is hybrid circuit technology meeting the needs of the electronics industry?"	11	May
"How is surface mount technology affecting the circuit assembly process?"	11	June
"What method of circuit cleaning works best for you?"	7	July
"What potential problems does static electtricity cause in your manufacturing operation?"	11	Aug.
"Do trade shows offer a significant contribution to industry?"	11	Sept.
"What areas of CAD/CAM/CAT would you investigate, evaluate, or analyze?"	10	Oct.

Connection and Termination Corner	Page	Issue
Guidelines for the use of Flat Cable and IDC Connectors	53	Jan.
Design Considerations and Connection Products for Meeting EMI and RFI Requirements	69	Feb.
UV Curing Compounds for Coating, Bonding, Potting, and Encapsulation	37	Mar.
Material Selection for Connector Body Insulation Keyed to Performance	59	April
Overview of High Density IC Packaging and Interconnections	51	May
Bus Bars for PCB Applications Keyed to Design, Performance	23	June
Demands on Connectors Lead to New Materials Development	53	June
Shielding Connectors, Testing Shielding Effectiveness Key to Protecting Against EMI/RFI	35	Aug.
Constructing Reliable Vehicles for Digital Signal Transmission	51	Aug.
Shield Measurement Techniques for Electronic Cable — Part 1	57	Aug.
Lead Wires Control Cost, Performance of Electronic Devices	60	Aug.
Test Conditions for Fiber Optic Connectors and Splices	35	Sept.
Shield Measurement Techniques for Electronic Cable — Part 2	53	Sept.
Surface Mounting and Fine Line Boards — Part 2	15	Oct.
Connectors: A Systems Viewpoint	57	Oct.
Thermoset Connectors Survive Adverse Conditions	57	Dec.

Electronic Production Abroad	Page	Issue
Update on the Electronics Industry in Malaysia	47	Jan.
Update on the Electronics Industry in Venezuela	65	Feb.
Update on the Electronics Industry in Puerto Rico	47	May

From the Editor	Page	Issue
Quality	4	Jan.
The Rationale for Industry Associations	4	Feb.
Opinions and Rambling Thoughts	4	Mar.
Automation: The Must Long Term Investment	4	April
Industry's Role in Research and Education	4	May
A 100 Percent Commitment	4	June
The Need for Surface Mount Standardization	4	July
The New ELECTRI•ONICS Cover	4	Aug.
A Previous Month, Last Month, This Month	4	Sept.
Facing the Worldwide Challenge	4	Oct.
What Will You Tell Your Stockholders Next Year?	4	Nov.
The Responsibility for Component Testing	4	Dec.

Hybrid Circuit Workshop	Page	Issue
Ceramic Chip Capacitors for Surface Mounting — Part 1	37	Jan.
Ceramic Chip Capacitors for Surface Mounting — Part 2	19	Feb.
Overview and Applications of Surface Mounting Technology — Part 1	27	Mar.
Overview and Applications of Surface Mounting Technology — Part 3	37	April
Manufacturing Technique Analysis for Surface Mount Technology	15	May
Variations in Processing Substrates with CCC's	20	May
Hybrid Overview	37	June
Clip-On Terminals Solve CCC Connection Problems	21	July
The Impact of Surface Mounting on Passive Components	21	Aug.
Fluorocarbon Cleaning Agents Increase Performance, Reliability	15	Sept.
Performance, Cost Reduction Key to Chip Resistor Market Growth	21	Sept.
Automated Layout Techniques Offer Circuit Design Solutions	31	Oct.
Design, Materials Selection Criteria for Packag-	35	Nov.

Index to ELECTRI•ONICS 1984 Feature Articles

Coil and Motor Manufacturing Tips	Page	Issue
Cost Reduction Through Automatic Testing of Electric Motors	61	Jan.
Testing Points to Problems in Armature Production	77	Feb.
Appliance and Motor Lead Wire Meet New Demands	44	Mar.
Evaluation of Tapes and Wrappers for Vacuum Pressure Impregnation of High Voltage Form Wound Coils	69	April
CAD Programs for Inductor, Reactor, Transformer Design	60	May
Production Balancing of Electrical Armatures	63	June
Moisture Resistant Banding Tape Secures Armatures From Centrifugal Forces	51	July
Concepts of D-C Brushless Motors	67	Aug.
A New Design Approach for Reciprocating Linear Motors	63	Sept.
Coil Winding Industry Trends Keyed to Changing Applications, Equipment Features	99	Oct.
Butt Stacking Cuts High Labor Costs in Transformer Laminations	65	Nov.
Multi-Mile Tapes Increase Coil Wrapping Productivity	63	Dec.

ELECTRI•ONICS Forum	Page	Issue
"Is printed circuit repair work expanding or receding as technology improves?"	6	Jan.
"What is the near term outlook for achieving essentially zero soldering defects in circuit boards?"	6	Feb.
"What recent equipment acquisitions have aided your printed circuit fabrication process the most?"	6	Mar.
"Do you feel UL standards are necessary and adequately address existing problems?"	11	April
"How is hybrid circuit technology meeting the needs of the electronics industry?"	11	May
"How is surface mount technology affecting the circuit assembly process?"	11	June
"What method of circuit cleaning works best for you?"	7	July
"What potential problems does static electtricity cause in your manufacturing operation?"	11	Aug.
"Do trade shows offer a significant contribution to industry?"	11	Sept.
"What areas of CAD/CAM/CAT would you investigate, evaluate, or analyze?"	10	Oct.

Connection and Termination Corner	Page	Issue
Guidelines for the use of Flat Cable and IDC Connectors	53	Jan.
Design Considerations and Connection Products for Meeting EMI and RFI Requirements	69	Feb.
UV Curing Compounds for Coating, Bonding, Potting, and Encapsulation	37	Mar.
Material Selection for Connector Body Insulation Keyed to Performance	59	April
Overview of High Density IC Packaging and Interconnections	51	May
Bus Bars for PCB Applications Keyed to Design, Performance	23	June
Demands on Connectors Lead to New Materials Development	53	June
Shielding Connectors, Testing Shielding Effectiveness Key to Protecting Against EMI/RFI	35	Aug.
Constructing Reliable Vehicles for Digital Signal Transmission	51	Aug.
Shield Measurement Techniques for Electronic Cable — Part 1	57	Aug.
Lead Wires Control Cost, Performance of Electronic Devices	60	Aug.
Test Conditions for Fiber Optic Connectors and Splices	35	Sept.
Shield Measurement Techniques for Electronic Cable — Part 2	53	Sept.
Surface Mounting and Fine Line Boards — Part 2	15	Oct.
Connectors: A Systems Viewpoint	57	Oct.
Thermoset Connectors Survive Adverse Conditions	57	Dec.

Electronic Production Abroad	Page	Issue
Update on the Electronics Industry in Malaysia	47	Jan.
Update on the Electronics Industry in Venezuela	65	Feb.
Update on the Electronics Industry in Puerto Rico	47	May

From the Editor	Page	Issue
Quality	4	Jan.
The Rationale for Industry Associations	4	Feb.
Opinions and Rambling Thoughts	4	Mar.
Automation: The Must Long Term Investment	4	April
Industry's Role in Research and Education	4	May
A 100 Percent Commitment	4	June
The Need for Surface Mount Standardization	4	July
The New ELECTRI•ONICS Cover	4	Aug.
A Previous Month, Last Month, This Month	4	Sept.
Facing the Worldwide Challenge	4	Oct.
What Will You Tell Your Stockholders Next Year?	4	Nov.
The Responsibility for Component Testing	4	Dec.

Hybrid Circuit Workshop	Page	Issue
Ceramic Chip Capacitors for Surface Mounting — Part 1	37	Jan.
Ceramic Chip Capacitors for Surface Mounting — Part 2	19	Feb.
Overview and Applications of Surface Mounting Technology — Part 1	27	Mar.
Overview and Applications of Surface Mounting Technology — Part 3	37	April
Manufacturing Technique Analysis for Surface Mount Technology	15	May
Variations in Processing Substrates with CCC's	20	May
Hybrid Overview	37	June
Clip-On Terminals Solve CCC Connection Problems	21	July
The Impact of Surface Mounting on Passive Components	21	Aug.
Fluorocarbon Cleaning Agents Increase Performance, Reliability	15	Sept.
Performance, Cost Reduction Key to Chip Resistor Market Growth	21	Sept.
Automated Layout Techniques Offer Circuit Design Solutions	31	Oct.
Design, Materials Selection Criteria for Packag-	35	Nov.

ing/Interconnecting Structures

Printed Circuit Techniques	Page	Issue
Developing and Implementing a Successful PCB Repair Program	21	Jan.
Registration Control for Printed Circuit Boards	29	Jan.
Direct Soldering of Ceramic Leadless Chip Carrier Solves Radio Production Problems	15	Feb.
Guidelines for Printed Circuit Surface Preparation	27	Feb.
Special Report: Printed Circuit Technology Reports	37	Feb.
Soldering Surface Mounted Chip Carriers to Printed Circuits — Part 2	15	Mar.
Printed Circuit Etchant Regeneration and Metal Recovery	19	Mar.
Developments in Additive Circuitry Using Polymer Thick Film Materials	17	April
Automated Production Brings More Efficiency to a PCB Facility	23	April
Manufacturing Technique Analysis for Surface Mount Technology	15	May
Conformal Coating Thickness Determination	27	May
Critical Issues in Implementing SMD Technology	19	June
De-Fluxing Dense Printed Wiring Assemblies	15	July
The Screen Printing Connection	39	July
Using Solder Masks: Design and Application Constraints	15	Aug.
The Impact of Surface Mounting on Passive Components	21	Aug.
The Importance of ESD Protection in Electronics Assembly	25	Aug.
Surface Mounting and Fine Line Boards — Part 1	25	Sept.
Factors Affecting Through-Hole Plating of Printed Wiring Boards	29	Sept.
Automated Layout Techniques Offer Circuit Design Solutions	31	Oct.
Wire Wrap Prototyping Speeds PCB Concept-Design-Production	35	Oct.
CAD Software for PCB Designers	49	Oct.
Cleaning Printed Wiring Assemblies: The Effects of Surface Mounted Components	13	Nov.
Analyzing Applications, Performance in Multilayer, Multiwire Board Technology	21	Nov.
Using Rack and Automatic Plating Lines for PCB Tabs	49	Nov.
Guide for Removal, Replacement of Surface Mounted Devices — Part 1	15	Dec.
Surface Mount Technology, Plastic Chip Carrier Trends	26	Dec.
Using Injection Molded Polymers for PCB Substrate Applications	35	Dec.

Production Soldering Clinic	Page	Issue
Soldering Surface Mounted Chip Carriers to Printed Circuits — Part 1	25	Jan.
Direct Soldering of Ceramic Leadless Chip Carrier Solves Radio Production Problems	15	Feb.
Zero Defect Soldering Tips for Management — Part 1	23	Feb.
Soldering Surface Mounted Chip Carriers to Printed Circuits — Part 2	15	Mar.
Zero Defect Soldering Tips for Management — Part 2	23	Mar.
Zero Defect Soldering Tips for Management — Part 3	27	April
Zero Defect Soldering Tips for Management — Part 4	37	May
Considerations for Laser Soldering Surface Mounted Connectors	28	June
Desoldering Components From High-Density PCB's	25	July
Wavesoldering of Discrete Surface Mounted Devices	41	Sept.
Cleaning Printed Wiring Assemblies: The Effects of Surface Mounted Components	13	Nov.

Testing Spotlight	Page	Issue
Achieving Better Insulation Evaluation Via Improved Thermomechanical Analysis	56	Jan.
Testing Points to Problems in Armature Production	77	Feb.
Overview and Applications of Surface Mounting Technology — Part 1	27	Mar.
Conformal Coating Thickness Determination	27	May
Macro-Viewing Lighting Techniques for IC Device Inspection	42	June
Clip-On Terminals Solve CCC Connection Problems	21	July
How Microstructural Analysis of Printed Circuit Boards Provides a Versatile Quality Control Method	29	July
Test Conditions for Fiber Optic Connectors and Splices	35	Sept.
Surface Mounting and Fine Line Boards — Part 2	15	Oct.
Bed-Of-Nails — Part 1	24	Oct.
The Mystery of Handheld DMM's	41	Oct.
Flexible In-Circuit Architecture Resolves Guard Pin Contention	26	Nov.
Bed-Of-Nails — Part 2	43	Nov.

Other Feature Articles	Page	Issue
Robot Applications in the Electronics Industry	43	Jan.
SEMICON/Europa '84	107	Feb.
Lead Wire and Glass Compatibility — Key to Precision Component Sealing	41	Mar.
SEMICON/West	31	April
Special Report: Materials, Metals, Plastics, and Components Technology Reports	43	April
Electro '84	63	April
Printed Circuit World Conference III and 27th IPC Meeting	115	April
Overview of Applications, Trends for Lithium Batteries	43	May
The Advantages of Integral Fasteners in Electronic Manufacturing	47	June
Using Robot Hoists for Ultrasonic Vapor Degreasing	45	July
Semicon East '84 Preview	41	Aug.
ISHM '84 Dallas	46	Aug.
17th Annual Connectors and Interconnection Technology Symposium	55	Aug.
Testing '84 Technology Reports	71	Aug.
Guidelines for Selecting Elastomeric Silicone Encapsulants	49	Sept.
Southwest Semiconductor & Electronics Exposition	56	Sept.
SEMICON/Southwest	61	Sept.
International Test Conference	66	Sept.
Circuit Expo '84	73	Sept.
Wescon/84	28	Oct.
International Wire and Cable Symposium	55	Oct.
Connections and Terminations Technology Reports	61	Oct.
Selection Guide for Electronic Encapsulation Techniques, Resins	89	Oct.
Coil Winding '84	94	Oct.
What Electronics Fabricators Should Know About Precious Metal Refining	57	Nov.
Forecast '85	21	Dec.
Using Liquid Crystals for Component, PCB Thermal Evaluations	41	Dec.
Wire and Cable Technology Reports	46	Dec.